EYEGLASS CASE WITH CLIP AND PIVOTABLE COVER

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to an eyeglass case, and more particularly to an eyeglass case that includes a clip and a pivotable cover.

2. Description of the Related Art

Referring to Fig. 1, a first conventional eyeglass case 1 is shown to include a case body 11, a cover 12, a horizontal pivot pin 13 extending through the case body 11 and the cover 12 so as to permit rotation of the cover 12 relative to the case body 11, a torsional spring 14 for biasing the cover 12 to turn upwardly, and a locking member 15 for locking the cover 12 releaseably on the case body 11.

The case body 11 includes an elliptical bottom wall 110, a surrounding wall 111 extending integrally and upwardly from an outer periphery of the bottom wall 110 to define an eyeglass-receiving space 112, a pivotal portion 113 for extension of the pivot pin 13 therethrough, and a retaining portion 114, on which the locking member 15 is mounted. The pivotal portion 113 is formed with a notch 115. The retaining portion 114 is formed with a hole 116 therethrough.

The cover 12 includes an elliptical top wall 121, a surrounding wall 122 extending integrally from an outer periphery of the top wall 121 to define an eyeglass-receiving space 123, and a lug 124 extending

integrally from the surrounding wall 122 into the notch 115 in the case body 11 and permitting extension of the pivot pin 13 therethrough. The surrounding wall 122 has a retaining portion 125 that is formed with a groove 126 in an inner surface thereof. The locking member 15 has a lower end fastened to an inner surface of the surrounding wall 122, a push button portion 151 extending through the hole 116 in the retaining portion 114, and a retaining hook 152 extending integrally and upwardly from the push button portion 151 and disposed outwardly of the surrounding wall 122. When the cover 12 is disposed at an open position shown in Fig. 1, a pair of eyeglasses 10 can be placed into the case body 11. Subsequently, the cover 12 is turned downwardly against the biasing action of the spring 14 to permit the retaining hook 152 to move into the groove 126 in the cover 12 so as to lock the cover 12 on the case body 11. Thereafter, the push button portion 151 of the locking member 15 can be pressed to remove the retaining hook 152 from the groove 126 in the cover 12 so that the spring 14 rotates the retaining portion 125 of the cover 12 away from the retaining portion 114 of the case body 11, thereby reopening the cover 12. However, it is inconvenient to carry the conventional eyeglass case 1 due to the fact that the cover 12 cannot be attached to a pocket or a belt.

Referring to Fig. 2, a second conventional eyeglass case 2 is shown to include a case body 21, a cover 22, and a clip 23. The case body 21 has a bottom wall 210, and a

surrounding wall 211 extending integrally and upwardly from an outer periphery of the bottom wall 210 to define an eyeglass-receiving space 212. The surrounding wall 211 is formed with a neck portion 213 at an upper end thereof. The cover 22 has a top wall 221, a surrounding wall 222 extending integrally and downwardly from an outer periphery of the top wall 221 to define an eyeglass-receiving space 223. The neck portion 213 of the case body 21 is press fitted within a lower end of the cover 22. The second conventional eyeglass case 2 suffers from the following disadvantages:

1. When it is desired to open the cover 22, the user must hold the case body 21 using one hand and remove the cover 22 from the case body 21 using the other hand. As such, it is difficult to open the cover 22.
2. The cover 22 tends to be misplaced due to the fact that it is not retained on the case body 21 when the cover 22 is opened.
3. As the cover 22 needs to have a sufficient length for mounting the clip 23 thereon, the case body 21 is relatively short so that a pair of eyeglasses 20 has a portion projecting outwardly of the case body 21, thereby resulting in difficult assembly of the cover 22 on the case body 21.

SUMMARY OF THE INVENTION

The object of this invention is to provide an eyeglass case that can overcome the disadvantages associated with

the above-mentioned conventional eyeglass cases.

According to this invention, an eyeglass case includes a case body, a cover, and a clip. The case body includes a bottom wall and a surrounding wall extending integrally and upwardly from an outer periphery of the bottom wall to define an eyeglass-receiving space therebetween. The surrounding wall of the case body includes an inclined top surface having an uppermost surface portion and a lowermost surface portion, a pivotal portion adjacent to the uppermost surface portion of the inclined top surface, and a retaining portion adjacent to the lowermost surface portion of the inclined top surface. The cover includes a top wall and a surrounding wall extending integrally and downwardly from an outer periphery of the top wall. The surrounding wall includes an inclined bottom surface that abuts against the inclined top surface of the case body and that has an uppermost surface portion and a lowermost surface portion, a pivotal portion that is adjacent to the uppermost surface portion of the inclined bottom surface and that is connected pivotally to the pivotal portion of the case body, and a retaining portion that is adjacent to the lowermost surface portion of the inclined bottom surface and that is locked releaseably on the retaining portion of the surrounding wall of the case body. The clip has a fixed portion connected fixedly to an outer surface of the surrounding wall of the cover, and a clamping portion extending downwardly from the fixed portion and disposed

adjacent to the cover. A pair of eyeglasses can be received between the case body and the cover.

Preferably, the eyeglass case further includes a spring that is connected to the case body and the cover so as to bias the retaining portion of the surrounding wall of the cover to turn away from the retaining portion of the surrounding wall of the case body when the retaining portion of the surrounding wall of the cover is released from the retaining portion of the surrounding wall of the case body.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other features and advantages of this invention will become apparent in the following detailed description of a preferred embodiment of this invention, with reference to the accompanying drawings, in which:

Fig. 1 is a sectional view of a first conventional eyeglass case that is provided with a pivotable cover biased to turn to an open position;

Fig. 2 is an exploded perspective view of a second conventional eyeglass case that is provided with a clip;

Fig. 3 is an exploded perspective view of the preferred embodiment of an eyeglass case according to this invention;

Fig. 4 is a fragmentary sectional view of the preferred embodiment, illustrating a closed position of a cover;

Fig. 5 is a fragmentary sectional view of the preferred embodiment, illustrating an open position of the cover; and

Fig. 6 is a sectional view of the preferred embodiment,

illustrating how a pair of eyeglasses is received within a case body when the cover is disposed at the open position.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figs. 3 and 4, the preferred embodiment of an eyeglass case according to this invention is shown to include a case body 3, a cover 4 connected rotatably to the case body 3 by a pivot pin 40, a torsional spring 5, a locking member 6, and a clip 7.

The case body 3 includes a circular bottom wall 31 and a surrounding wall 33 extending integrally and upwardly from an outer periphery of the bottom wall 31 to define an eyeglass-receiving space 32. The surrounding wall 33 includes an inclined top surface 331 that has two uppermost surface portions 332, a lowermost surface portion 333, and two curved surface portions 334, each of which is located between the lowermost surface portion 333 and the corresponding uppermost surface portion 332. The surrounding wall 33 further includes a pivotal portion 335 adjacent to the uppermost surface portions 332, a retaining portion 336 adjacent to the lowermost surface portion 333, a notch 337 located between the uppermost surface portions 332, two lugs 338 flanking the notch 337, and a hole 339 formed through the surrounding wall 33 and located just under the lowermost surface portion 333.

The cover 4 is rotatable relative to the case body 3 between a closed position shown in Fig. 4 and an open position shown in Fig. 5, and includes a circular top wall

41 and a surrounding wall 43 extending integrally and downwardly from the top wall 41 to define an eyeglass-receiving space 42. The surrounding wall 43 has an inclined bottom surface 431 with two uppermost surface portions (431U) (only one is shown in Fig. 4) and a lowermost surface portion (431L), a pivotal portion 432 adjacent to the uppermost surface portions (431U), a retaining portion 433 adjacent to the lowermost surface portion (431L), a U-shaped projection 434 formed on the pivotal portion 432 and extending between the lugs 338 of the case body 3, and a groove 435 formed in an inner surface of the retaining portion 433. The retaining portion 433 is spaced apart from the top wall 41 by a distance that is larger than the distance between the pivotal portion 432 and the top wall 41. The pivot pin 40 extends through the projection 434 and the lugs 338 so as to permit rotation of the cover 4 relative to the case body 3 about the pivot pin 40.

The torsional spring 5 has a coiled portion 51 disposed around the pivot pin 40, and two ends 52, 53 pressing respectively against inner surfaces of the case body 3 and the cover 4 so as to bias the retaining portion 433 of the cover 4 to turn away from the retaining portion 336 of the case body 3. As such, the cover 4 is biased to rotate to the open position. The torsional spring 5 can be replaced with any other suitable springs to perform the same functions.

The locking member 6 is unitary, and includes a lower

end 61 fastened to the retaining portion 336 of the case body 3 by a rivet 60, a push button portion 62 extending through the hole 339 in the case body 3, and a retaining hook 63 extending upwardly from the push button portion 62 and disposed outwardly of the case body 3.

The clip 7 has a fixed portion 71 connected fixedly to an outer surface of the surrounding wall 43 of the cover 4, and a clamping portion 72 extending downwardly from the fixed portion 71 and disposed adjacent to the outer surface of the surrounding wall 43. The clip 7 can be attached to a pocket or a belt.

Referring to Fig. 6, when the cover 4 is disposed at the open position and when the case body 3 is in a somewhat inclined position, a pair of eyeglasses 8 can be placed into the case body 3 such that an upper end of the eyeglasses 8 abuts against an inner surface of the surrounding wall 33 of the case body 3. As such, when the retaining portion 433 of the cover 4 is pressed toward the retaining portion 336 of the case body 3 against the biasing action of the spring 5, the eyeglasses 8 will not be clamped between the case body 3 and the cover 4. Hence, the retaining hook 63 will engage the groove 435 so as to lock the cover 4 on the case body 3.

Subsequently, for the purpose of reopening the cover 4, it is only necessary to press the push button portion 62 of the locking member 6 to unlock the cover 4 from the case body 3 in a known manner.

With this invention thus explained, it is apparent that numerous modifications and variations can be made without departing the scope and spirit of this invention. It is therefore intended that this invention be limited only as indicated by the appended claims.